

REMARKS

This Amendment is submitted in response to the Office Action mailed on May 29, 2008. With this Amendment, claims 1, 5, 7, 9, 10, 13, 21 are amended and claims 27-33 are added.

Claim Objections

In the Office Action, claim 5 was objected to as being a substantial duplicate of claim 2. Claim 5 has been amended such that its scope is now different from that of claim 2. Therefore, claim 5 is now proper.

Claim Rejections – 35 U.S.C. § 112

In the Office Action, claims 9-11 and 13-20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the inventions. Claims 9, 10 and 13 have been amended and claim 33 has been added such that positive antecedent basis for each limitation included in claims 9-11 and 13-20 is provided. Therefore, the rejection under § 112 is overcome.

Since the Office Action states that independent claim 13 and dependent claims 14-20 would be allowable if rewritten or amended to overcome the rejections under § 112, claims 13-20 are now in condition for allowance.

Claim Rejections – 35 U.S.C. § 103

Claims 1-6 and 21-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cifaldi (US 6,372,978) in view of either Moroi et al. (US 2002/0039534) or Araoka et al. (JP 09139217). Claim 8 was under 35 U.S.C. § 103(a) as being unpatentable over Cifaldi in view of either Moroi et al. or Araoka et al. as applied to claims 1-6 and 21-26, and further in view of Merida-Donis (US 6,569,298). In addition, claim 12 was under 35 U.S.C. §

103(a) as being unpatentable over Cifaldi in view of either Moroi et al. or Araoka et al. as applied to claims 1-6 and 21-26, and further in view of the further teachings of Araoka et al.

With this Amendment, independent claim 1 has been amended to clarify that the electrolysis unit of the solar electrolysis power source of the present invention includes a electrolysis chamber for containing water and a pH sensor. The pH sensor allows a system controller to monitor the pH of the water in the electrolysis chamber. The water in the electrolysis chamber needs to be slightly acidic with a pH value preferably between 6 and 7. A slightly acidic pH is desired to facilitate transfer of charge between a cathode and an anode, which are also located within the electrolysis chamber. Pg. 5, paragraph [0031].

In addition, independent claim 5 has been amended to clarify that the electrolysis unit of the solar electrolysis power source of the present invention includes an electrolyte tank for containing an electrolyte. When the pH of the water in the electrolysis chamber becomes too basic, the system controller will trigger the release of the electrolyte from the electrolyte tank into the water to re-adjust the pH to an optimal level. Pg. 5, paragraph [0031]. As such, the environment inside the electrolysis chamber remains slightly acidic.

Finally, independent claim 21 has been amended to clarify that the electrolysis unit of the solar electrolysis power source of the present invention includes an electrolysis chamber containing for water and a water level sensor. The water level sensor allows a system controller to monitor the level of the water in the electrolysis chamber. When the water level reaches a preset minimum, the system controller will trigger the release of additional water from a water source, such as a holding tank, into the electrolysis chamber. Pgs. 4-5, paragraph [0031].

As noted in the Office Action, the prior art of record, including Cifaldi, Moroi et al., Araoka et al. and Merida-Donis, fails to teach or fairly suggest providing a fuel cell system as set forth with a pH sensor, water level sensor, or electrolyte tank. Therefore, claims 1-6, 8, 12 and 21-26 are no longer obvious and overcome the objection under § 103(a).

New Claims

Additionally, with this Amendment, claims 27-33 have been added. Claims 27-30 depend from independent claim 1 and supply additional detail regarding the pH sensor. Claims 31 and 32 depend from independent claim 21 and supply additional detail regarding the water sensor. Claim 33, which depends from claim 9, which depends from claim 8, which depends from independent claim 5, has been added to overcome the rejection of claim 9 under § 112. As described above, independent claims 1, 5 and 21 are now in condition for allowance. Therefore, dependent claims 27-33 are patentable and should be allowed.

Conclusion

With the above amendments and discussion, claims 1-33 are in condition for allowance and notice to that effect is requested.

The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

Respectfully submitted,

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